

The Deltagram

TRADE MARK REG. U. S. PAT. OFF.

VOLUME FIFTY

Issue No. 4

PRICE TEN CENTS



- ★ REMODEL YOUR OLD PIANO
- ★ MODERN CHEST OF DRAWERS
- ★ LAWN SEAT
- ★ READING TABLE
- ★ BIRD HOUSES
- ★ DESIGNS ★ ETC.



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With Delta **CRAFTERS**

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PHOTOGRAPH 1 shows one of our youngest crafters. He is Edwin Adams of Denver, Colorado. When Edwin was two years old Mr. Adams built him his first work bench, just 24 inches high. Now, at the age of nine Edwin has rebuilt his work bench himself, to a height of 36 inches, with more storage and tool space. He has built many projects from the DELTAGRAM, and uses not only hand tools, but the jig saw and drill press, and has recently started using the lathe under the guidance of his father. With such an early start, we are certain that Edwin will turn out to be an expert crafter.

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★ A MAGAZINE FOR CRAFTSMEN

★ PUBLISHED BY THE DELTA MANUFACTURING COMPANY, MILWAUKEE, WISC. SOLD ONLY BY SUBSCRIPTION - 50¢ THE YEAR.

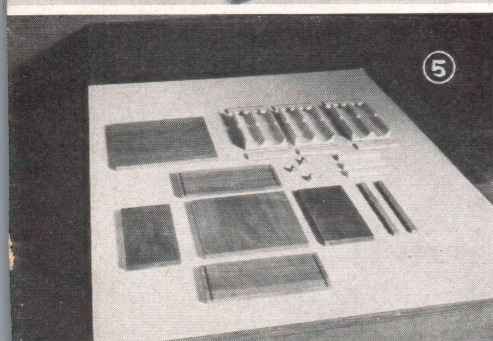
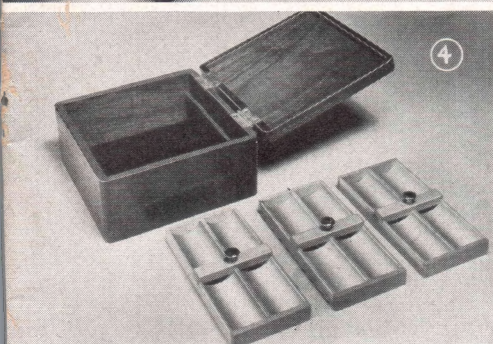
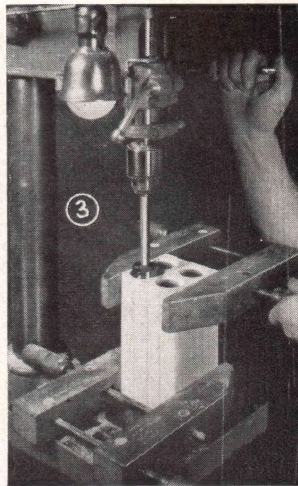
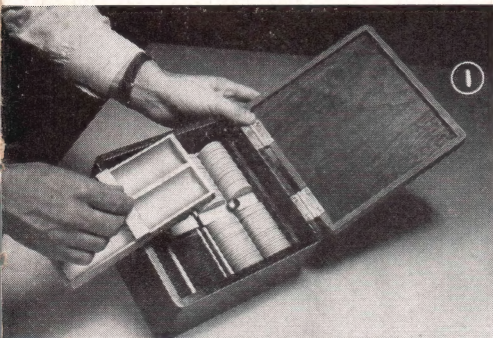
★ E. G. HAMILTON - MANAGING EDITOR

A. M. WARKASKE - TECH. EDITOR

VOLUME FIFTEEN

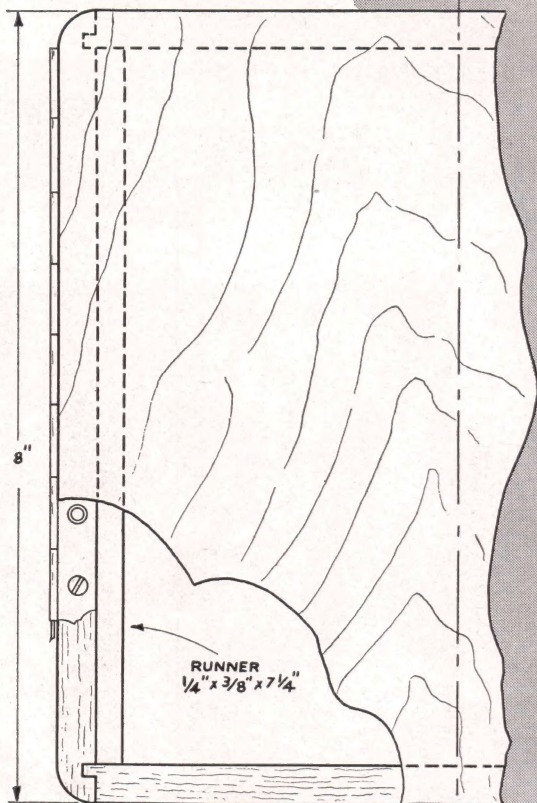
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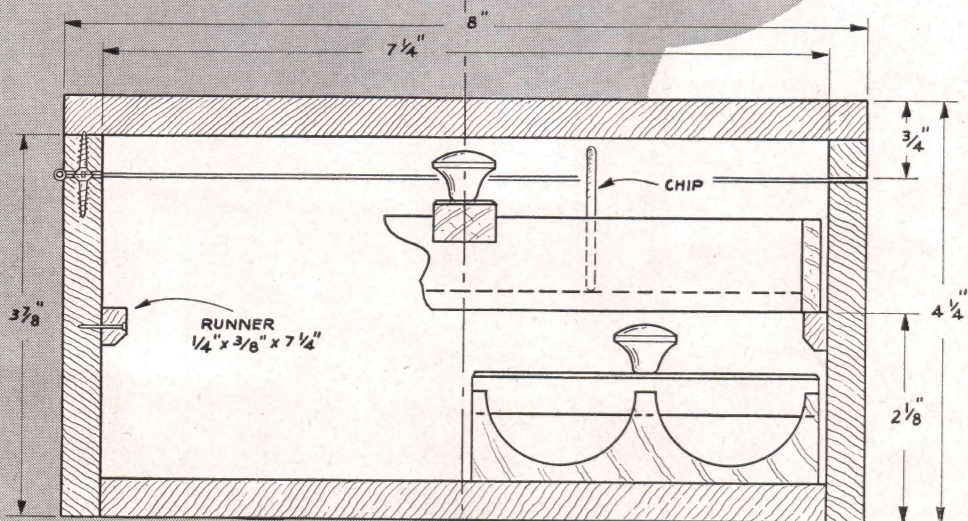
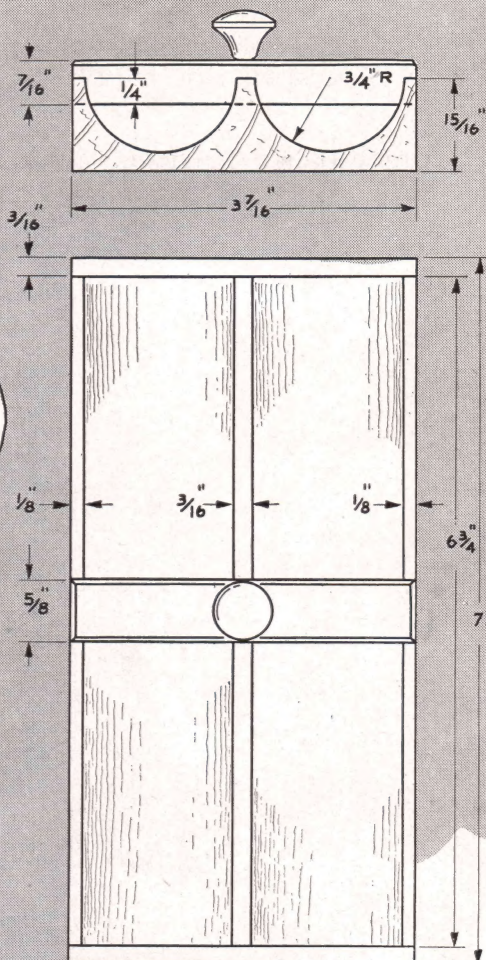


Poker Chip Box

☆ HERE'S a poker chip box in which the chips are completely enclosed with 3 or 4 removable trays. The box itself is regular construction with tongue-and-groove corners. The half-round cuts in the trays for holding the chips may be cut in either of two methods shown in Photographs 3 and 6. In Photo 3 holes are drilled in either a solid piece or blocks held together with clamps. If a solid piece is used, the block is then band sawed apart to form individual trays. Photograph 6 shows blank knives in the shaper head ground to the correct half-round shape for cutting a groove.



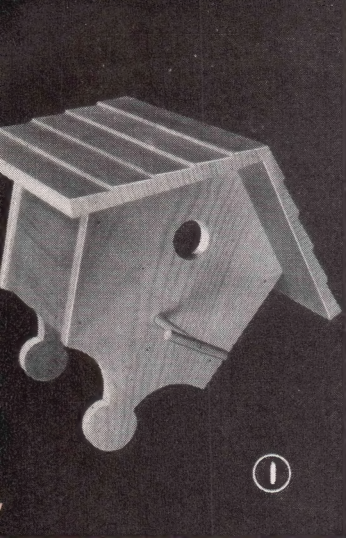
BOX MADE OF
3/8" STOCK



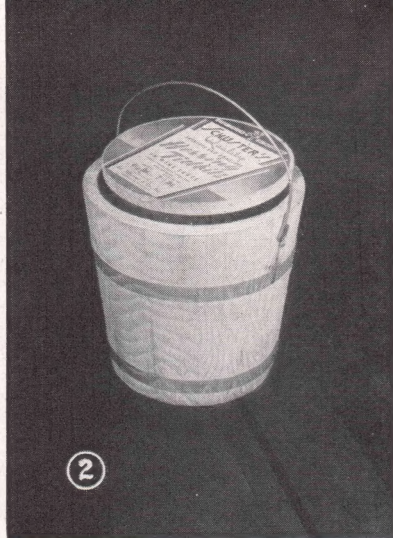
DESIGNS

These are full size drawings which can be easily traced directly on the material to be cut. Paint the material with a flat coat of paint before drawing the design.





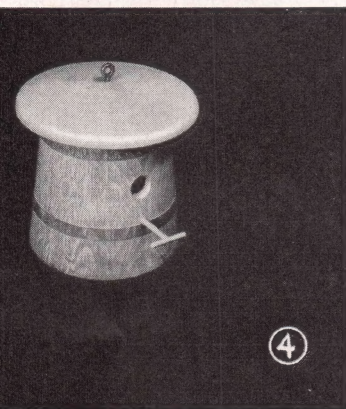
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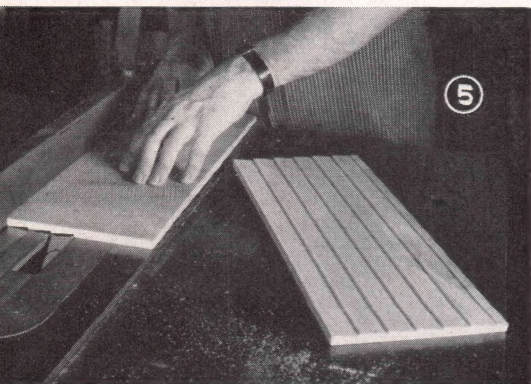


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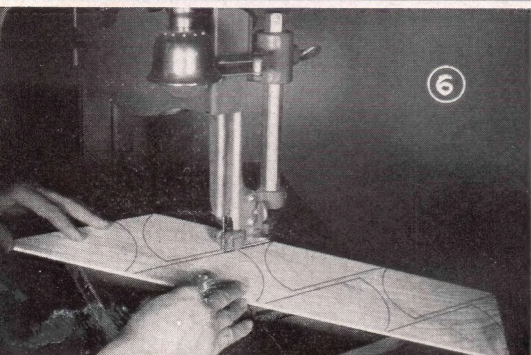
BIRD HOUSES

☆ HERE are two new designs in bird houses to add to your yard this spring. The house shown in Photograph 1 is ordinary nailed construction. The only unusual feature is the roof design which is made as shown in Photograph 5. The moulding

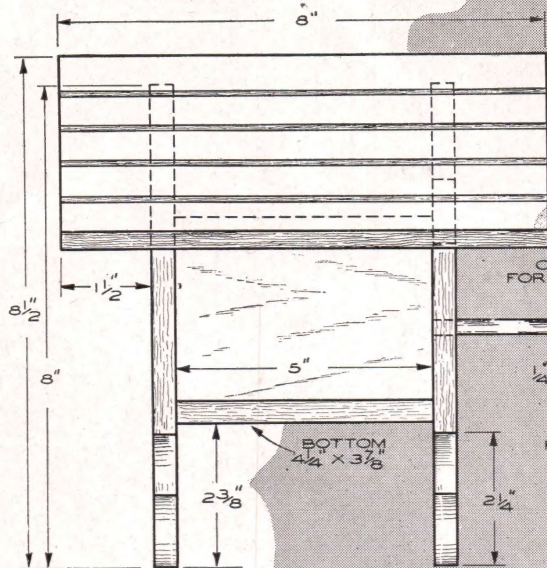
head with straight knives is tilted at a slight angle and successive cuts are made to give the effect of lapped roofing. The bird house shown in Photographs 3 and 4 was made from a discarded wooden bucket such as shown in Photograph 2. Two types of roof designs are shown. Photograph 4 is a plain lathe turning, dimensions of which are shown in the drawing on the following page. The peaked roof is made up of 8 pie-shaped segments, the dimensions of which are shown in the drawing. The saw table is tilted to $14\frac{1}{2}$ degrees for cutting these segments so that they will go together accurately.



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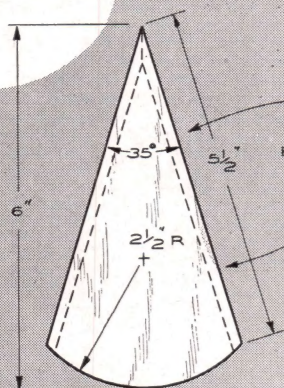
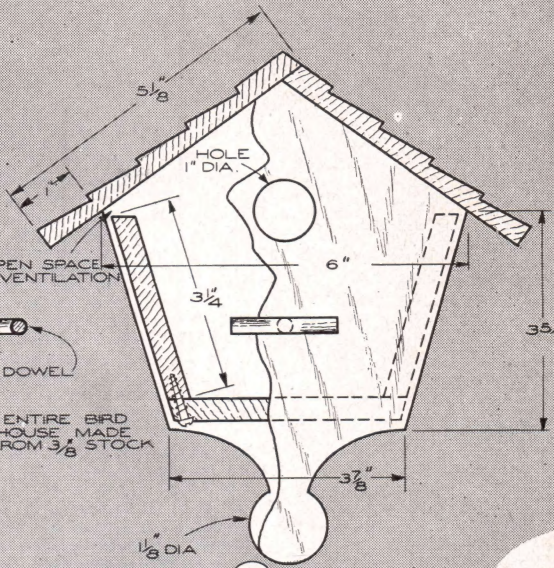
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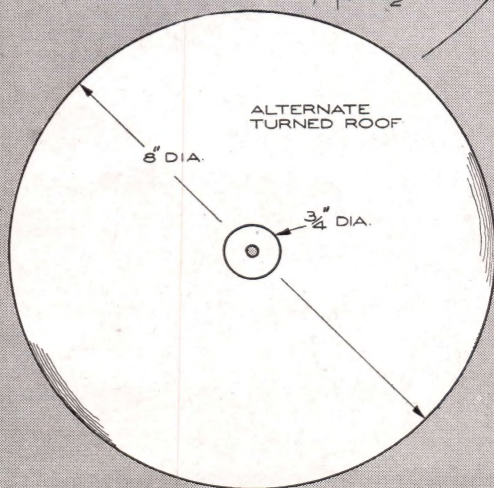
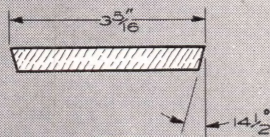
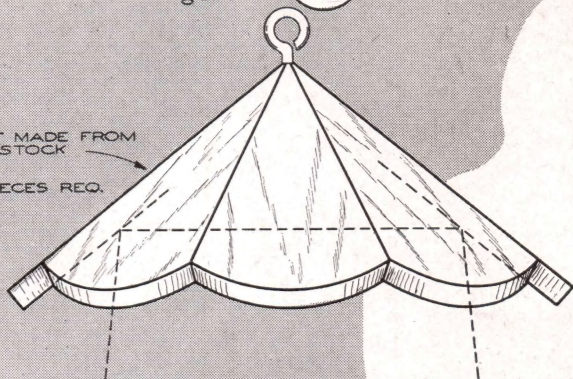
OPEN SPACE FOR VENTILATION

1/4" DOWEL

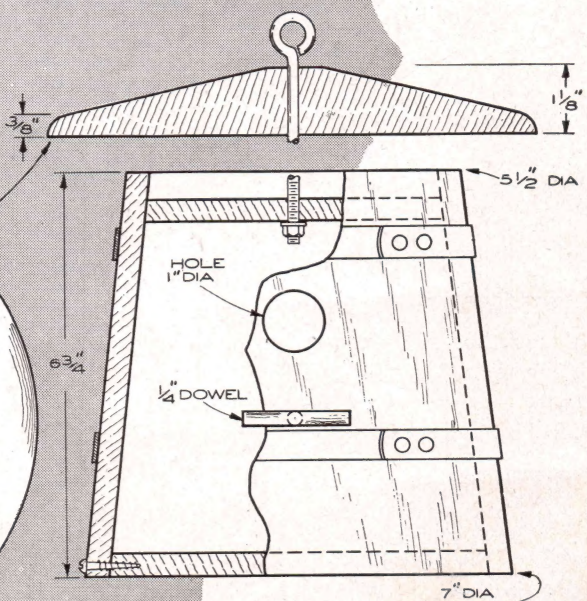
ENTIRE BIRD HOUSE MADE FROM 3/8" STOCK



ROOF MADE FROM 3/8" STOCK
EIGHT PIECES REQ.

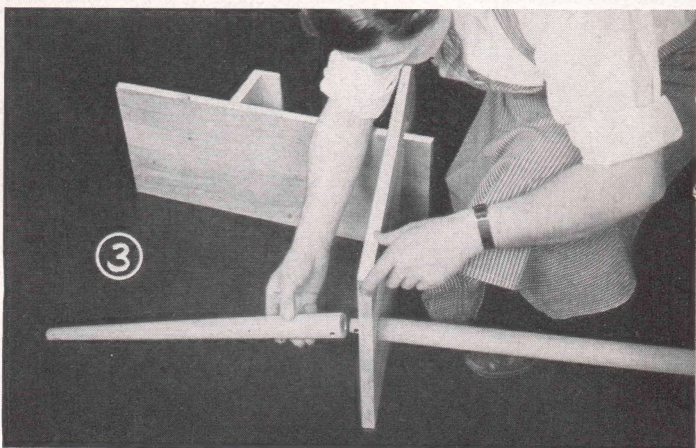


ALTERNATE TURNED ROOF





The table shown above was made from maple or birch hardwood and finished natural with one or two coats of shellac sealer followed by two coats of spar varnish.

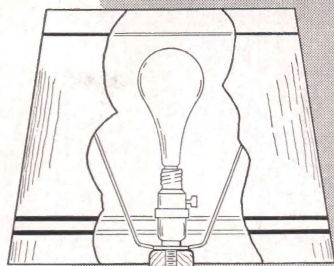


Modern READING TABLE

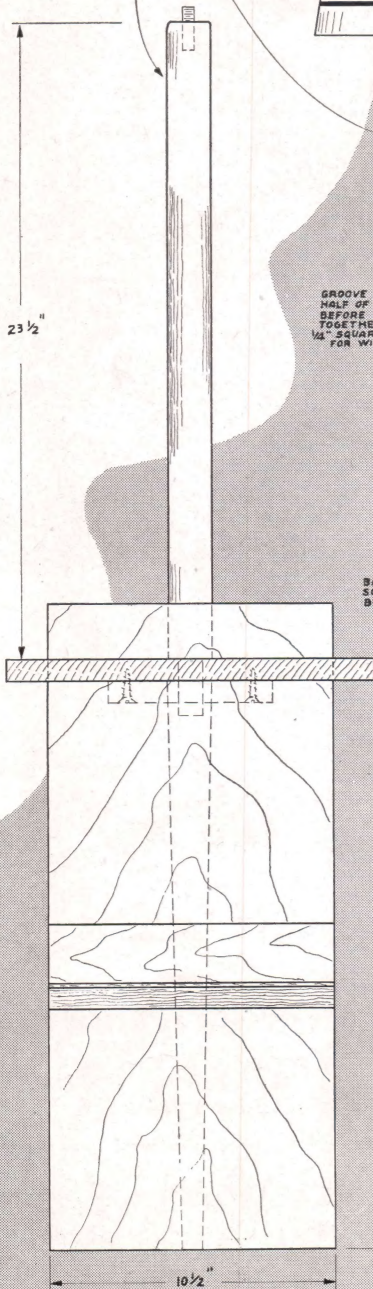
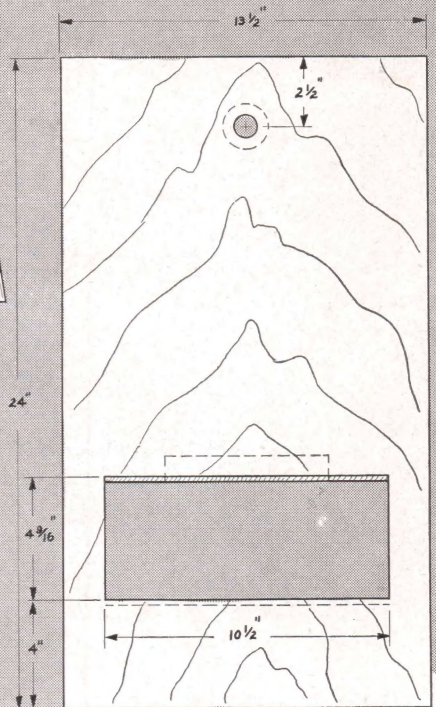
☆ THE combination reading table shown in the photographs above serves 3 purposes. First, a floor lamp, then an occasional table, and finally, a magazine rack.

The construction is fairly simple. The lamp column is made in 2 parts. The lower tapered section is solid with merely a hole drilled in the top for assembling. The top part of the column is made up of 2 halves which are grooved before glueing together to leave a space for the electric wiring. (See detail in drawing.) The table top itself is $\frac{3}{4}$ " stock and a hole is cut through to the dimensions shown in the drawing to accommodate the magazine rack. Photograph 3 shows the groove being cut with the dado head for assembling the magazine rack to the table top. This joint is then reinforced with a $\frac{3}{4}$ " square cleat as shown in the drawing. The tray which holds the magazines is rabbeted into the slanting board as shown in the drawing on the following page. The table is assembled as shown in Photograph 3.

MADE FROM TWO PIECES OF $1\frac{3}{4}'' \times \frac{7}{8}''$ STOCK - GLUED TOGETHER AND TURNED TO $1\frac{5}{8}''$ DIA.

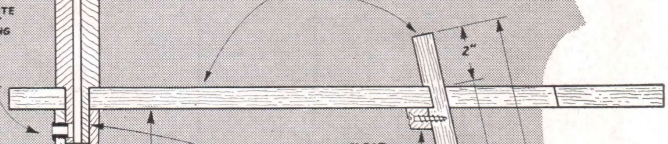


GROOVE CUT IN EACH HALF OF STOCK BEFORE GLUING TOGETHER - LEAVES $\frac{1}{4}''$ SQUARE OPENING FOR WIRING



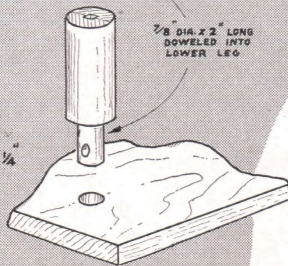
BAKELITE SOCKET BUSHING

TOP AND FRONT SUPPORT MADE FROM $\frac{3}{4}''$ STOCK

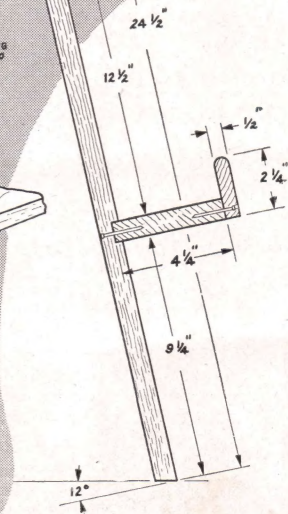


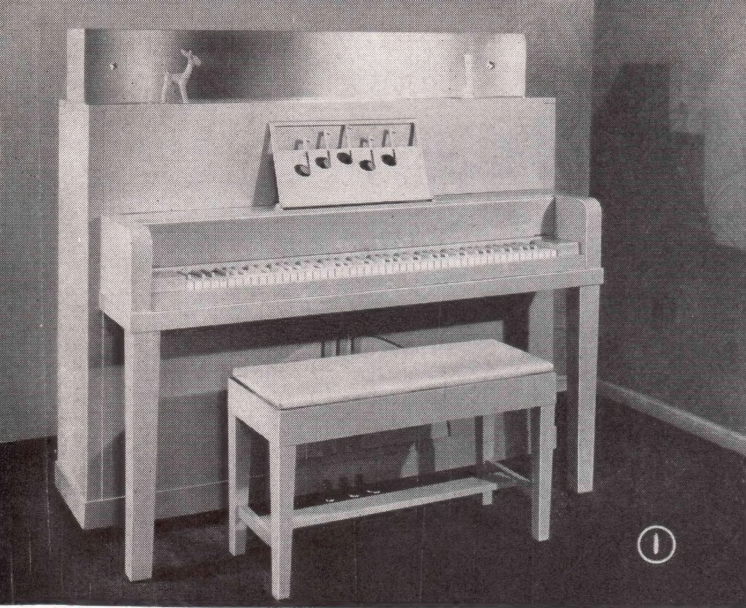
CLEAT $\frac{3}{4}'' \times \frac{3}{4}'' \times 6''$

$\frac{7}{8}''$ DIA. $\times 2''$ LONG DOWELED INTO LOWER LEG

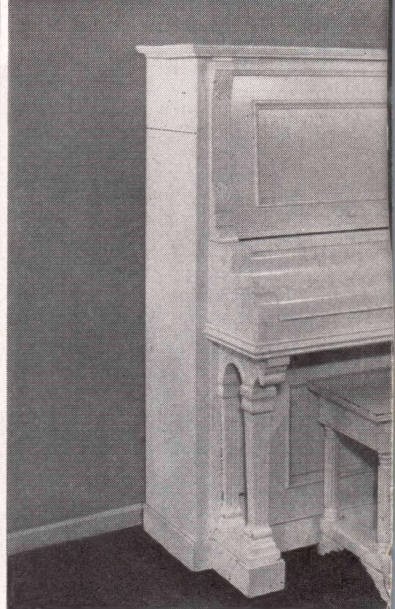


LOWER LEG TAPERED FROM $1\frac{3}{8}''$ TO $\frac{3}{4}''$ DIA.





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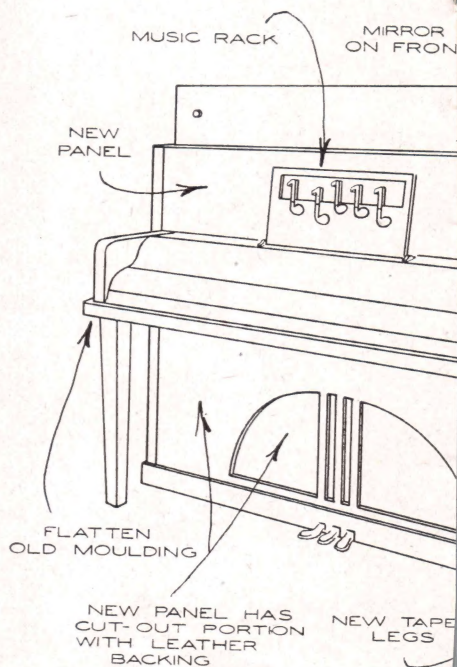


Remodel Your Old PIANO

☆ NOW you can have a modern looking piano from that old upright at a very small cost, plus a little craft work on your part.

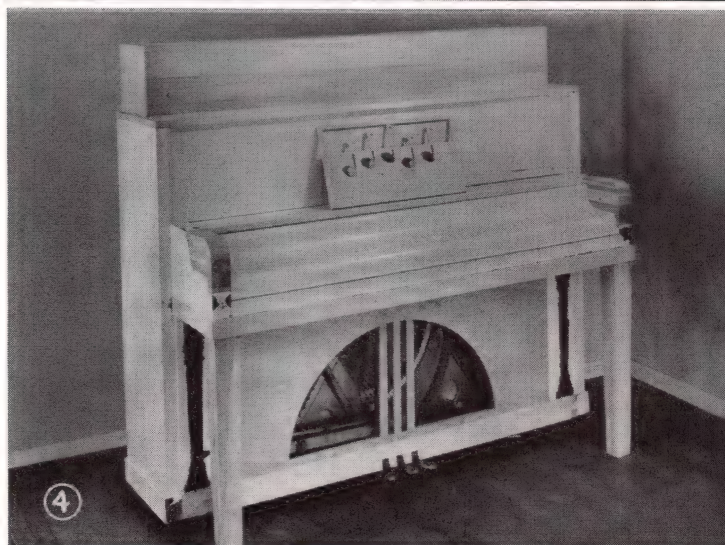
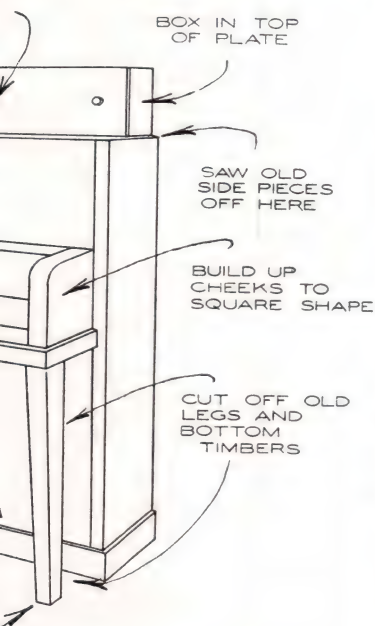
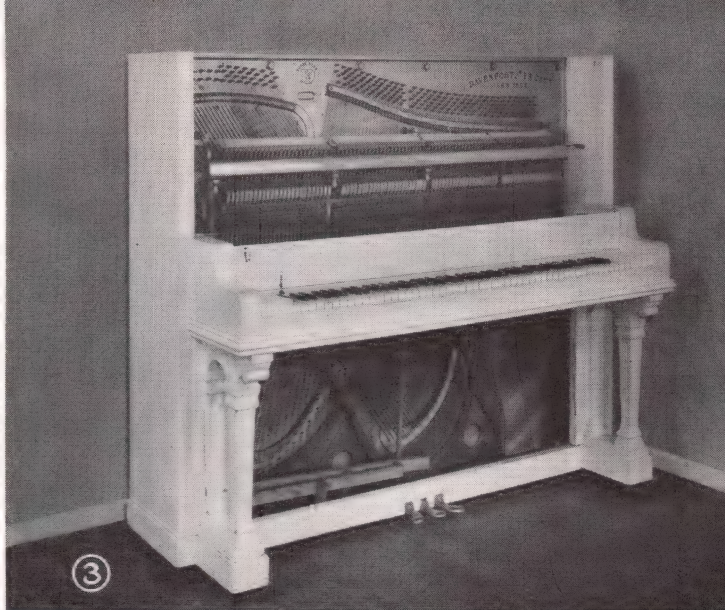
The modern piano shown in Photograph 1 was remodeled from the piano shown in Photograph 2. The first step was to strip the removable panels as shown in Photograph 3. The side boards were then sawed off approximately on the dotted line shown in Photograph 2. This leaves ample clearance for the mallets when the top part of the piano plan is boxed in as shown in Photograph 4. A plain new panel is then added on the front face over the mallets. The old curve in the cheeks of the piano should be filled in as shown in Photograph 4. They are built up to a square design as shown in Photograph 1 and 5.

As seen in Photograph 4, the old legs were taken off and the lower timbers were sawed off flush with the front edge. A plain new panel was set in with the modern cut out design, and new plain tapered legs were attached. The fancy moulding around the base of the keyboard was

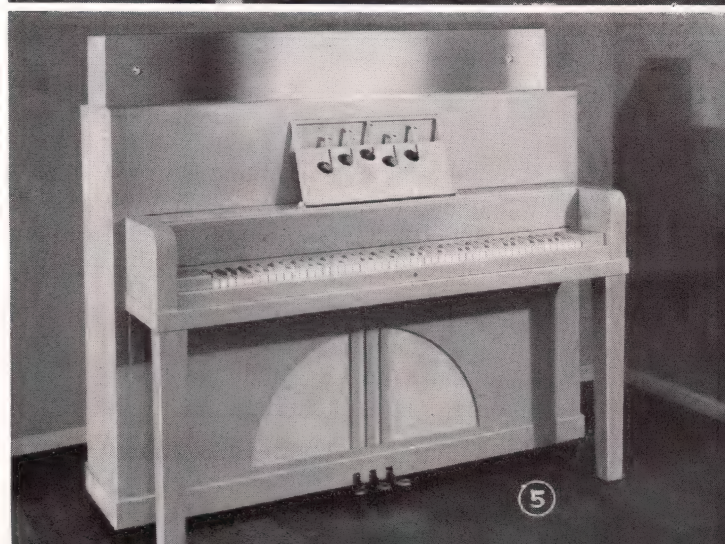


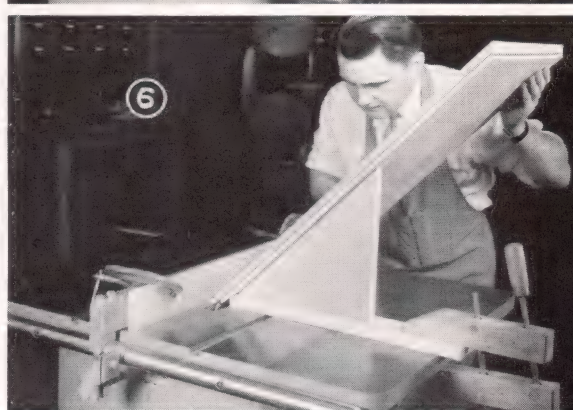
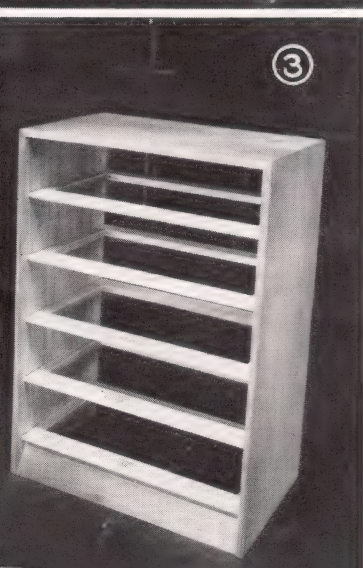
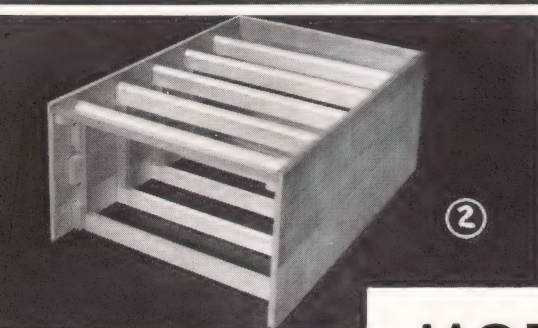
removed and replaced with a plain jig-sawed from $\frac{3}{8}$ " plywood and The opening in the lower panel v matching piece was used to cover section of the piano is then face creates the illusion that your pia though the overall dimensions h

The stool was redesigned in a with matching tapered legs.



at strip. The music rack was
 attached with small brackets.
 s backed with leather and a
 he top of the stool. The top
 with a mirror. This mirror
 is now lower in height, al-
 not been changed.
 roximately the same manner

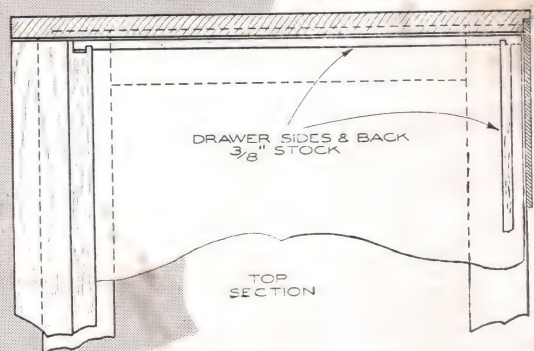
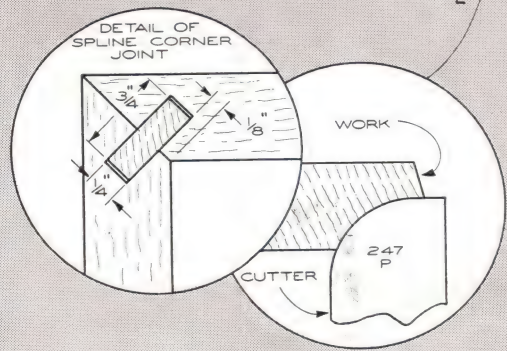
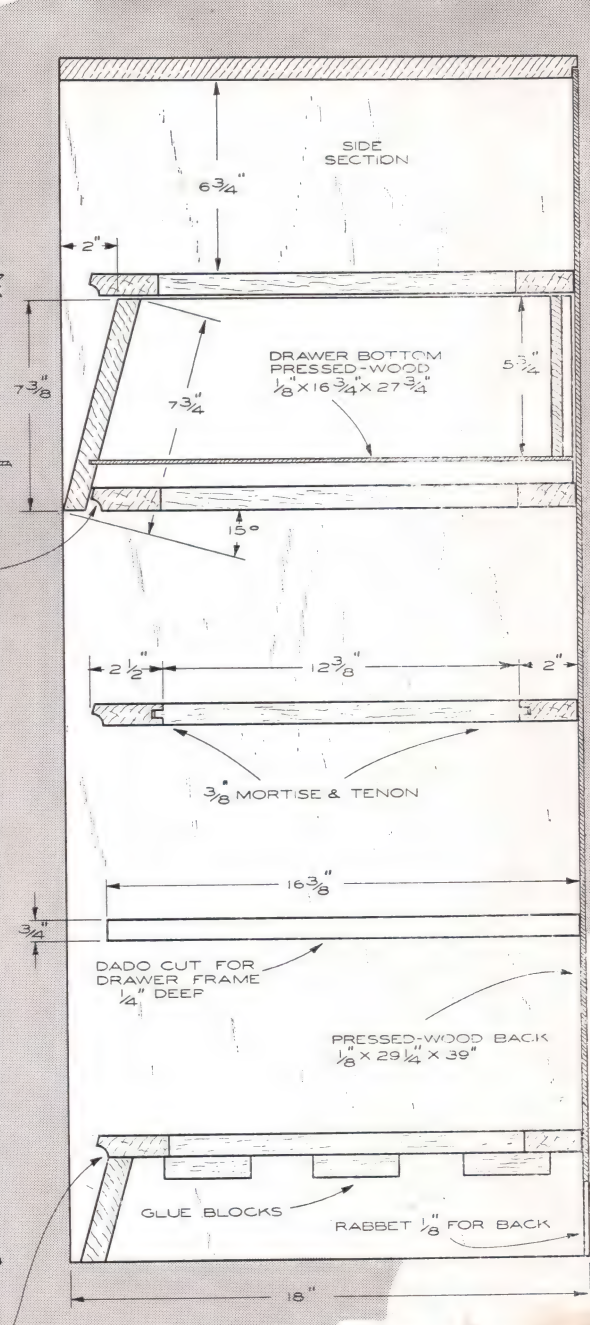
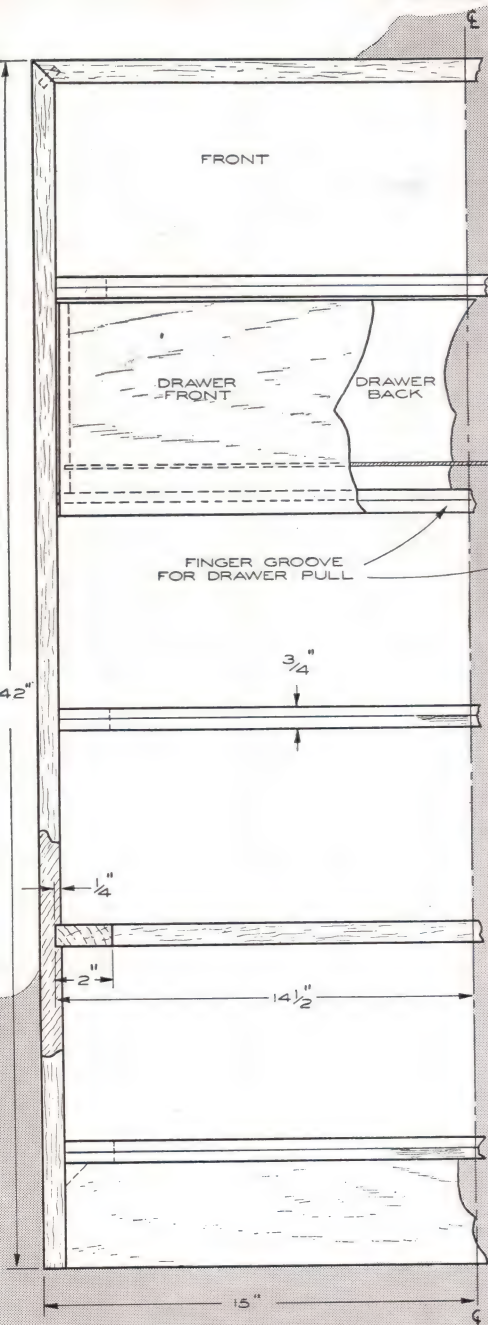


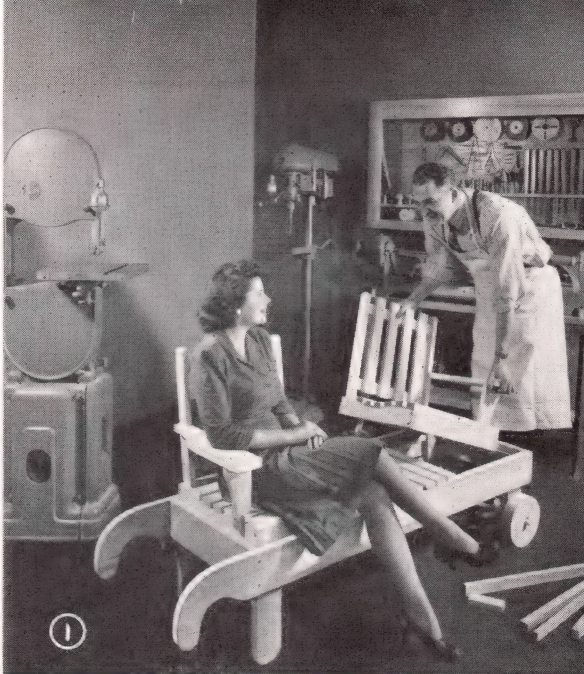
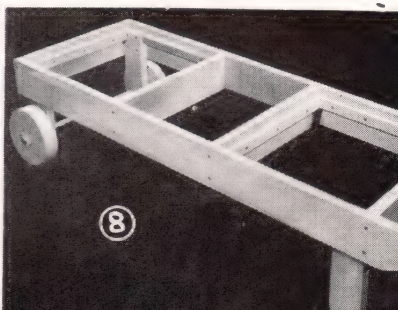
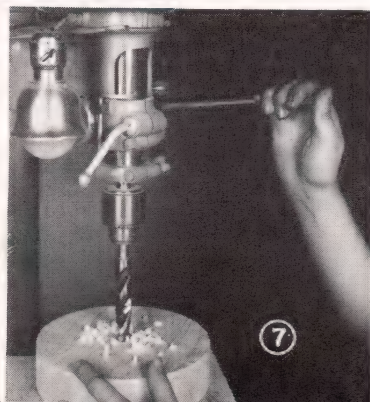
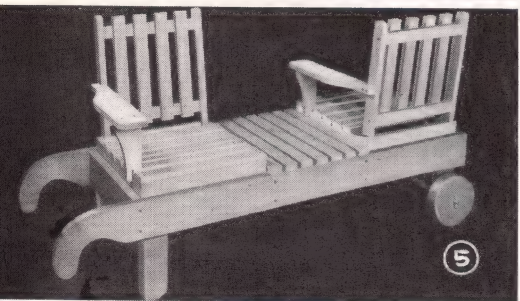
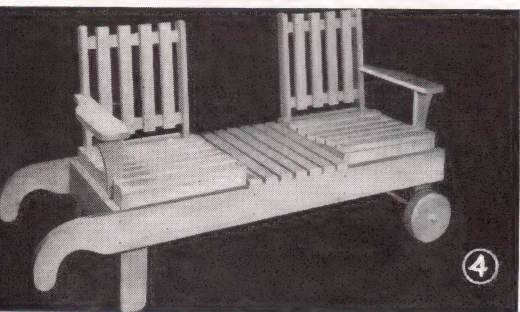


MODERN CHEST OF DRAWERS

☆ HERE'S a modern chest of drawers in natural birch that through its design eliminates any hardware ordinarily used for the drawer pulls. The front of the drawer is slanted as shown in the drawing, and the drawer frames have a cut out moulding along the bottom of the front edge to provide space for a hand grip. These drawer frames are rabbeted into the sides as shown in the drawing.

Photograph 5 shows a jig to be used in cutting the rabbet for the spline and mitered joint on the top corner of the chest. The rabbet is shown being cut in Photograph 6.

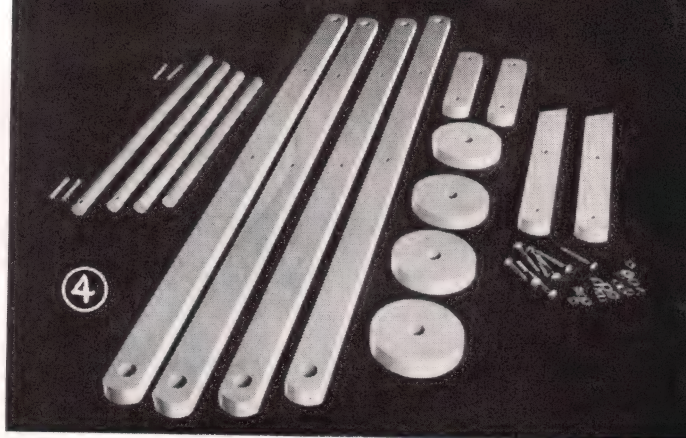
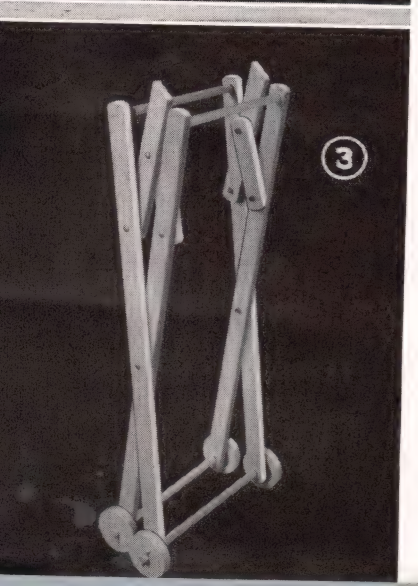
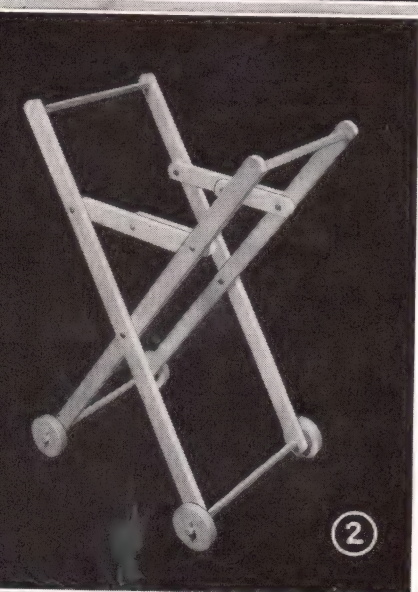




LAWN SEAT

☆ THE novel feature of this lawn seat is the two removable chairs which can be placed in almost any position, as can be seen in Photographs 2 through 5.

These seats are perfectly square and are identical with the exception of the arms, one seat having the arm on the left side and the other on the right. Photograph 6 shows the assembly of one of the seats. Photograph 7 shows the wheel being drilled to hold the axle. Photograph 8 shows the completed frame before the center slats are attached.

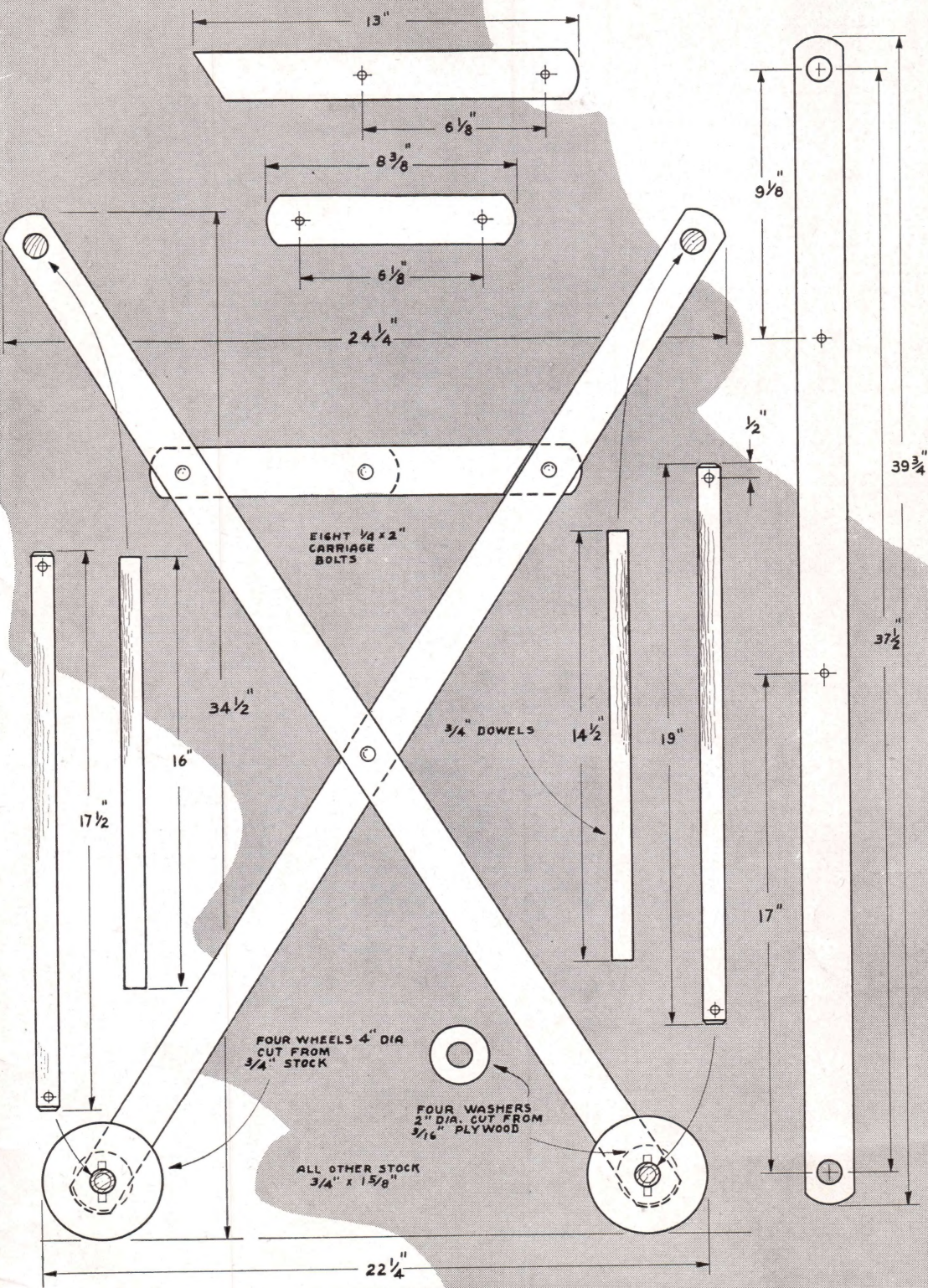


Build This Handy **CLOTHES BASKET CART**

☆☆☆

THIS handy cart may be made from either pine or basswood scrap, or hardwood such as birch if you prefer. It is used to carry the clothes basket as shown in Photograph 1, and folded away as shown in Photograph 3 when not in use.

The parts required when building this cart are shown in Photograph 4. The stock is of $\frac{3}{4}$ " x $1\frac{5}{8}$ " stock. The wheels are band sawed to shape and drilled to receive the $\frac{3}{4}$ " dowel axles. Four $\frac{3}{16}$ " plywood washers are cut and drilled to be used as spacers between the wheel and the folding frame. The cart is assembled with eight $\frac{1}{4}$ " x 2" carriage bolts as shown in the drawing. For outside use the cart should be rubbed well with boiled oil and sealed with several coats of shellac.



FLYING CHIPS

Here's My Solution

Long Lake, N. Y.: Having noticed your finishing problem in the September-October issue of the Delta-gram, I wish to offer my suggestions.

No conifer wood ever takes either a water or oil stain satisfactorily, at least not to my satisfaction, because variation in the grain causes unequal absorption. I have had best results by mixing very thin, a good grade of lead and oil paint the desired shade or a little lighter (remembering that if you intend to varnish the varnish adds a slight amber tint). Apply this mixture with a soft brush, stroking with the grain. Let it stand a few minutes, but not until the shine begins to dull off. Then wipe off with clean, dry cloth until it is almost hand dry. Let it dry for at least 24 hours, then varnish. If necessary, more than one coat can be applied. Another and easier way to get good results on these woods, especially on fir plywood or hemlock, is to use a colored or transparent lacquer either sprayed or brushed on. The lacquer is to be applied directly to the unpainted wood only.

I like to mix my own paint because of the substitutes being used. I use pure white lead, raw linseed oil, and spirit turpentine, mixing these on the drill press with a small paddle made from a long bolt and wing nut.

J. W. A.

Ski Making

Buffalo, N. Y.: As soon as machines are again available I expect to add a scroll saw to my shop. My wife and I will use this equipment.

In going over past issues of the Delta-gram I was not able to find any information on the making of skis. Is there a book on this subject? I could make several pair right now if I had some plans. I would be especially interested in some method of bending the stock.

I just received a copy of "How to Plan a Home Workshop." It sure is a swell little book.

J. E. McL.

We expect to feature an article on this subject in a future issue of the Delta-gram.

Plastic Fabrication

White Plains, N. Y.: Do you have any pamphlets or material similar to the projects shown in the Delta-gram for working and handling of plastics? I have used your magazine at the Hartford Community Workshops and also at the General Hospital in Rome, Georgia. Many of the materials can be applied to plastics but I wondered if you had specific information on this subject.

Miss E. K.—O. T. R.

There are many good books on this subject which can be obtained from your local library or bookstore. One of these is "General Plastics" by Cherry published by McKnight and McKnight.

The Delta-gram A Good Magazine

Fall River, Mass.: I have just been discharged from the Navy and wish to add my word of praise on your magazine. I have had to set up my shop again and also my library of shop books and magazines.

Thus, going through some of my old magazines I noticed to a marked degree how the other magazines had wandered away from the old style of projects. But the Delta-gram is still filled with some interesting articles. That, in my opinion is as it should be, and it is the only craft magazine I now subscribe to. This doesn't probably mean much to you, but to me it means it is the only magazine that caters to the novice and the advanced craftsman. Please keep it that way.

The truck pictured on the inside of the front cover of Vol. 15, Issue No. 2, made by Mr. Hawkinson of Duluth, Minn., looks pretty nice. How about the plans for same if available.

C. F. S.

Similar plans of the above-mentioned truck designs will be featured in some future issue of the Delta-gram.

Working on Shaper to .002 Limits

St. Louis, Mo.: I thought you and the readers of the Delta-gram might be interested in an incident that occurred some time ago while I was working at a local aircraft factory.

It was necessary to produce a number of veneer parts to precision dimensions. In order to do this on form work it was impossible to finish them to size with the knives, so we made an auxiliary head for the shaper, shaped to use with the shaper guide. Then the parts were shaped to close finish size; after this we used the auxiliary head and finished them to precision dimensions with this head. They were entirely satisfactory and the variations were less than .002. I might add that we used the knives with a piece of masking tape on the form and removed it when we finished the parts.

W. M. P.

A Good Suggestion

Detroit, Michigan: I have been a Delta-gram subscriber since way back in 1932 and still have all my old copies. I think it is a very fine little magazine. One thing I would like to see you publish is a page devoted to new ways and equipment to do things. I have made quite a few of the projects described in the Delta-gram.

I like to read the "Flying Chips" page. It is interesting to read about other people.

Here is a little advice to S. K. in the last issue of the Delta-gram. I use my shaper for the same purpose of cutting grooves with two six-inch saws. The reason my saws do not burn is because I cut down the speed of the shaper by changing to the same size pulley on the shaper spindle as on the motor shaft. This means that the saws run about 3500 R.P.M. which is just about right to keep them from burning.

M. B.

Repetition Work on the Lathe

St. Rose, Que., Canada: We would like to know if there is anything you can recommend for doing repetition work on the lathe. Is it possible to make a standard wood lathe into a semi-automatic machine?

Our present system which some of your readers might like to know of is as follows. A pattern was made of the article on a piece of sheet steel or strap iron. This was screwed to the tool rest. A stop was fixed to the underside of the chisel and, when this stop follows the pattern or template it duplicates the same design on the turning in the lathe.

If you or some of the Delta-gram readers can recommend any better method please let us know.

R. T.

Ideas for Next Christmas

Clemson, S. C.: Will you please tell the Delta-gram editors to put this project in the Delta-gram (and not in the little black book).

A complete block set for children for constructing a house or several houses. This is to be complete with columns, porch, chimney, windows, etc. Make sure it's an early issue so we'll have plenty of time to finish it before next Christmas.

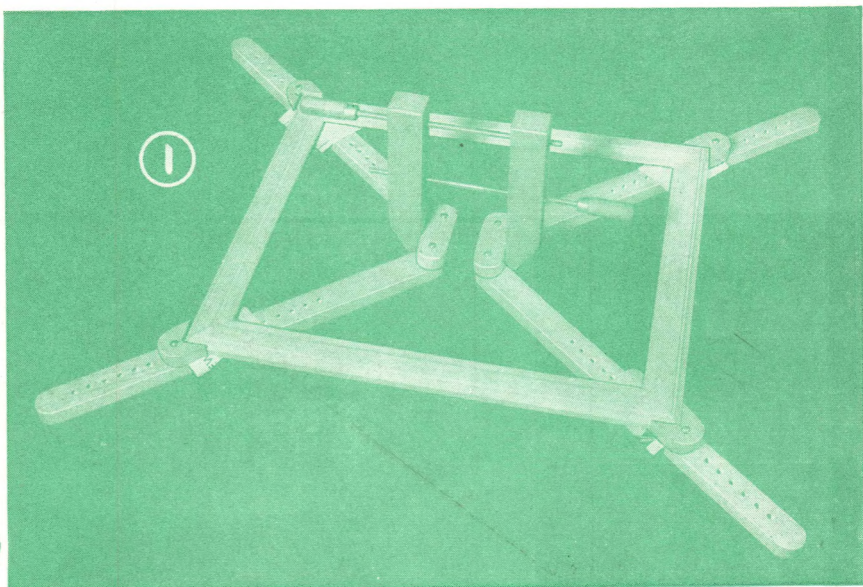
J. S.

We have made a special note of this project and we'll try our best to have it ready for this coming holiday season.

Wheel Article Is O.K.

Duluth, Minn.: Many thanks for showing the picture of my truck on the Delta-gram page of your recent issue of the Delta-gram.

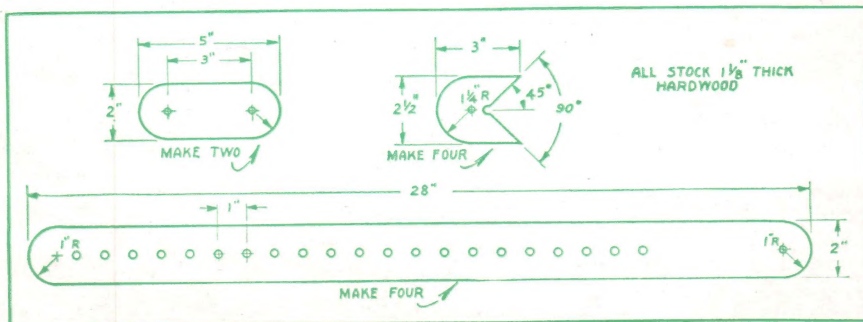
The article on wooden wheels in issue No. 2 is just what I've wanted for a long while. One can't beat the Delta-gram for practical down-to-earth things to make. We certainly enjoy the pictures of things other craftsmen around the country are making. Sure makes for a fuller and happier life. Keep up the good job on your magazine. Mr. and Mrs. B. E. H.



PICTURE FRAME CLAMP

HERE'S a simple clamp for use in gluing mitered frames together. The clamp is made in two exactly similar halves, and consists of two radial arms, a cross piece, and two pivoted blocks.

All parts should be made from hardwood such as maple. The parts of the clamp are held together with $5/16''$ bolts, the holes for which are drilled one inch apart along the center lines of the arms. You will notice that the long arms can be made any convenient length as the size of the frame to be clamped does not effect these parts. Note that the points of the notches which hold the corner of the frame to be clamped should be relieved by drilling a hole so that the extreme points for the frame will not be crushed and so that the frame will draw together properly. Any good parallel clamp will draw the two edges of the clamp together if it has been adjusted to the frame being glued.



**EVERYTHING
YOU NEED FOR
RESULTS YOU WILL
BE PROUD OF!**

NOW

DELTA offers you A COMPLETE FINISHING KIT

A PRACTICAL WORKING KIT FOR THE AVERAGE CRAFTSMAN: The Delta Junior Stain and Varnish Finishing Kit contains all the basic materials necessary to help you do a good working stain and varnish job. Clear instructions included in the kit advise you on when and how to use the various finishing materials to enjoy the best results.

Now—in one kit—you get the materials you need and the high quality you want for completed jobs that look as if they were done by an expert.

You Get Your Choice of These Seven Stain and Filler Colors. Be sure to ask for the correct color you want when ordering your kit.

Light Oak	Walnut
Golden Oak	Red Mahogany (cherry)
Dark Oak	Dark Brown Mahogany
Fumed Oak	

Here's What You Get:

Quantity	Size	Item
1	pint	Delta Penetrating Oil Stain (indicate color you desire)
1	2-inch	Shellac Brush #2000
1	2-inch	Varnish Brush #2024
3 sheets	5/0	Garnet Finishing Paper
3 sheets	7/0	Garnet Finishing Paper
3 sheets	1/2	Sandpaper
1	1/2-pint	Delta Paste Wood Filler
1	pint	Delta Rubbed Effect Varnish
1	pint	Delta Plastic Spar Varnish
1	pint	Delta White Shellac, 4# cut
1	pint	Delta Orange Shellac "
1	quart	Delta Shellac Cutting Alcohol
1	quart	Delta Varnish Thinner
1	pkg. (3 1/2 yds.)	Cheese Cloth
1	bottle	Delta Creme Polish

CATALOG No. 4030—Complete Delta Junior Stain and Varnish Finishing Kit, including all items listed in box above and complete instructions

\$7.95
postpaid

THE DELTA MFG. CO.

600 E. VIENNA AVENUE
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Printed in the United States of America